COMPOSITIONS FOR INFERRING BOVINE TRAITS

ABSTRACT OF THE DISCLOSURE

Methods, compositions, and systems are provided for managing bovine subjects in order to maximize their individual potential performance and edible meat value, and to maximize profits obtained in marketing the bovine subjects. The methods and systems draw an inference of a trait of a bovine subject by determining the nucleotide occurrence of at least one bovine SNP that is identified herein as being associated with the trait. The inference is used in methods of the present invention to establish the economic value of a bovine subject, to improve profits related to selling beef from a bovine subject; to manage bovine subjects, to sort bovine subjects; to improve the genetics of a bovine population by selecting and breeding of bovine subjects, to clone a bovine subject with a specific trait, to track meat or another commercial product of a bovine subject; and to diagnose a health condition of a bovine subject. Methods are also disclosed for identifying additional SNPs associated with a trait, by using the associated SNPs identified herein.